•	Approved Formelease 2005/06/23 : CIA-RDP78B0477 001600020019-4
TT0: -	MEMORANDUM RECEIPT 1 June 1965 DATE
T10:	
FROM:	ussell D.
SUBJECT	Loan of 9½" Film
	I hereby acknowledge receipt of the following: Seventy-five $9\frac{1}{5}$ " X 18" frames, numbered 1924 through 1998. Length of
	I hereby acknowledge receipt of the following: Seventy-five 9½" X 18" frames, numbered 1924 through 1998. Length of imagery approximately 116 feet.
х *	Seventy-five $9\frac{1}{2}$ " X 18" frames, numbered 1924 through 1998. Length of
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CONTROLS AND READOUTS

The control and readout panel is the interface between the man and the machine, reflecting the nature of the machine at this point. The panel depicted herein is for an electromechanical machine control. Space for solld state circuitry, code reader, and for a block tape reader will be allocated in the original design to permit easy retrofit should a code reader be added in the future. When the additional sophisticated features are added, the control panel can be completely removed and replaced with a control panel compatible with the electronic circuitry and the additional features.

CONTROLS - *asterisk indicates readout and control

- *i. Negative Rewind
- *2. Negative Wind
- *3. Raw Stock Advance
 - 4. Film Type
 - 5. Exposure Setting
- *6. Mode
- *7. Basis

- *8. Number of Prints
- *9. Search
- *10. Standby
- *11. Print
- *12. On
 - 13. Off
 - 14. Panel Lamp
 - 15. Manual Negative Motion
 - 16. Strip Length

READOUTS

1. Raw Stock

*4. Present Location

2. Negative

*5. Auto Counter

3. Warning

*6. Number of Prints

7. Prints-in-Run

CONTROLS

1. NEGATIVE REWIND

Pressing this solenoid-held, lighted push-button will cause the negative to be rewound to the beginning frame. (Present Location Counter = 0000) and stop.

Also, the light will come on and the button will be held in. The control is inoperative if in "Search" or "Print" conditions, or if the "Wind" Negative button is pushed. When the beginning frame is reached, the button will be released and the light will go off. The machine can be stopped prior to this by pushing the "Standby" button.

2. <u>NEGATIVE WIND</u>

Pressing this solenoid-held, lighted push-button will cause the negative to be wound upon the take-up reel.

The light will come on and the button will be held in.

The film leaving the supply sprage loop will cause

the machine to stop. The button will be released and the light will go off. The machine can be stopped at any time by pushing the standby button. The control is inoperative if in "Search" or "Print" condition, or if the "Rewind Negative" button is pushed.

3. RAW STOCK ADVANCE

This momentary contact, illuminated push-button will light when pressed. The raw stock will advance an amount determined by the setting of the mask each time the button is pressed. Continuous advance will be achieved by holding the button in. This control is inoperative when in the "Print" condition.

4. FILM SPEED 1, 2, 3, 4

This is a rotary selector switch with four settings for various film types. The function of the control is to bias the exposure control computer in accordance with the film speeds assigned to the positions.

5. EXPOSURE SETTING 1/4, 1/2, N, 2, 4, AND TEST

This is a rotary selector switch with six settings for exposure setting. The function of the control is to provide a quarter, half, normal, two and four times emposures for the exposure control and Test Settings.

6. MODE

This is an alternate action, lighted push-button switch for selecting machine operation in either the "Manual" or in the "Consecutive" mode. The button lights will be split so that when in the "Manual" setting, the lights behind the word Manual will be lit, and when in the "Consecutive" mode, the lights behind the word Consecutive will be lit.

All searching operations must be performed in the manual mode.

7. BASIS

This is an alternate action lighted push-button. The button lights will be split so that when in the "Frame" position the word Frame will be lit and when in the "Footage" position, the word Footage will be lit. The switch functions as a selector for the inputs to the Present Location Counter and the Auto Counter. Whenever the switch is changed from one position to the other, the Counters will be reset to 0000.

8. NUMBER OF PRINTS

This is a lighted alternate action push-button.

Its function is to select either an indefinite number of prints when in the "Multiple" position, or the number of prints entered in the Number of Prints Counter when in the "Counter" position. If in the Approved For Release 2005/06/23: CIA-RDP78B04770A001600020019-4

"Multiple" position, the machine may be stopped by pushing the "Standby" button. The "Prints-In-Run" Counter is to be used for determining the total number of prints made in any run. It may be reset at any time.

9. SEARCH

This is a solenoid-held push-button that lights when it is engaged. It is only operative when in the "Manual" mode. The button is released and the light goes off when the number desired (which was entered in the Auto Counter) is reached. The "Search" Button disables the "Manual Negative Motion" control. "Search" is also inoperative if the Negative Rewind or Negative Wind controls are activated.

10. STANDBY

This is a momentary contact push-button that lights when pressed. Its function is to stop the machine from winding, rewinding, searching, printing, or advancing raw stock, when the button is pressed. The machine will finish the exposure if in the middle of an exposure, or if searching, it will follow the same stopping procedure that it does when the correct frame is found. If winding or rewinding, it will permit completion of the function. The Standby light will light when pushed, and also when the machine is ready after a timed warm-up period when the machine is first Approved For Release 2005/06/23: CIA-RDP78B04770A001600020019-4 turned on.

11. PRINT

This is a solenoid-held, lighted push-button that lights when it is engaged. It is inoperative if searching, rewinding, winding or advancing raw stock or before the machine is warmed up. It will also be inoperative if the number of prints counter is 00 when the number of prints switch is in the "Counter" position. Its function is to start the machine printing. In the "Manual" mode the button will be released when the Number of Prints Counter goes to zero, or when the Standby button is pushed if in the "Multiple" condition, and the print cycle is completed.

12. CN

This is a momentary contact illuminated push-button that lights as long as the line contactor is engaged. When this button is depressed, current flows through the energizing coil of the line contactor. Auxiliary normally open contacts in the line contactor parallel the contacts of this switch so that the contactor remains engaged when the button is released.

13. OFF

This is a momentary contact illuminated push-button that causes all power to the machine to be disconnected when pushed. The button will be red in color Approved For Refease 2008/06/23: Clark PP78B64770Ab01600020019=4

right hand corner of the control panel. When depressed, the energizing coils of the A.C. line contactor is opened and the contactor opens. The normally closed contacts in the line contactor cause the push-button to be lighted when the contactor is open and the main circuit breaker is on.

14. PANEL LAMP TEST

This is a combination push-button switch and potentiometer. When depressed, all panel indicators that use an incandescent bulb as a light source are illuminated and the warning buzzer is activated. The rotary control will cause the light intensity to be continuously variable from full on to off. The pushbutton will light the bulbs only to the maximum intensity.

15. MANUAL NEGATIVE MOTION

This is a "stick" control connected to a potentiometer. Movement of the stick to the right or left
causes the potentiometer output voltage signal to
vary to control the capstan drive motor. Moving
the stick to the right will cause the capstan drive
to move the negative film forward, and moving the
stick to the left will cause the capstan drive to
move the negative film backwards. The system will
be damped so that the direction of motion cannot be

suddenly reversed or otherwise damage the film.

READOUTS

1. RAW STOCK

This backlit readout will be lit when an undesirable condition exists in the Raw Stock sub-system. It will light, for example, to indicate that the raw stock supply is low.

2. NEGATIVE

This backlit readout will be lit when an undesirable condition exists in the Negative sub-system.

3. WARNING

This is a backlit readout that will be activated only in case of machine malfunction. For minor failures, the illumination will be constant; for major failures, the readout will flash on and off in synchronization with the warning horn. Any failure indication would automatically stop the machine in its standby mode, but a major failure would activate the emergency off control.

4. PRESENT LOCATION

This is a four digit presetable electromechanical bidirectional counter mounted on the control panel for ease of access and viewing. It represents the frame number or footage that operator wishes to start from as a datum. When the BASIS selector is in the

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(depending on direction of travel) one for each frame of films passed. When the BASIS selector is in the FOOTAGE position, this counter will add or subtract one for each foot of film passed. Whenever the BASIS is changed, the counter will be reset to CCOO.

5. AUTO COUNTER

This is a four digit presetable electromechanical counter that counts down. When in the manual mode, the operator can set the counter to the number of frames (or footage) that he wishes to advance. Pressing the "Search" button causes the negative film to advance. Each frame (or foot of distance) of film that is passed causes the counter to be reduced by one. When the counter reads 6000, the machine will stop. If the operator wishes to make prints of N consecutive frames, he will enter the Number N into the auto counter. The 'Mode' switch must be set in the consecutive position and the number of prints counter must not equal zero. When the "Print" button is pushed the machine will proceed to make prints of the N frames. When the auto counter reads 0000, the machine will stop.

6. NUMBER OF PRINTS

This is a two-digit electromechanical presetable counter that counts down. When the associated switch Approved For Release 2005/06/23: CIA-RDP78B04770A001600020019-4 is in the "Counter" position, the machine (after the

"Print" button has been pushed) will make the number of prints that the operator entered into this counter. When this counter counts down to 00, the machine will stop if in the manual mode, or go on to the next frame in the consecutive mode. If in the consecutive mode, the counter will automatically revert to the number that the operator originally entered into this counter so that this number of prints of the N frames will be made for each successive frame until the auto counter equals 0000.

7. PRINTS-IN-RUN

This is a four-digit electromechanical counter that counts up and that is resettable by the operator. Its function is to count prints that have been made over whatever the operator wished to classify as a run. This could be on a basis of time or of reels.

RAW STOCK Approved For Release 2005/06/23: CIA-RI PRESENT LOCATION BASTS		[WARNING]
NEGATIVE FRAMES FOOTHGE		
NEGATIVE NEGATIVE MANUAL REWIND WIND CONSECUND	NUMBER OF PRINTS NULTIPLE COUNTER	ON OFF
RAW STOCK NOVANCE		PANEL LAMP INTENSITY CONTROL
FILM SPACE EXPOSURE SEARCH STANDBY 1 3 3 1/2 4 TEST MINUAL NEGAT	TRINT	OFF PUSH TO MAX
to accept pencil not	LOW	
of environs type on, REVERSE	FORWARD	
		13.
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